Chlorpromazine-induced cutaneous pigmentation — effect of replacement with clozapine

Dear Sir:

Chlorpromazine induces abnormal skin pigmentation (ASP) in areas exposed to sunlight.[1] The prevalence of ASP in chronically hospitalized psychiatric patients varies from 1% to 2.9%.[2] In a cross-sectional study, Ban et al[2] noted that 6 of their 13 patients with ASP were not receiving chlorpromazine at the time of evaluation, including a patient receiving clozapine, and concluded that there was no relation between the type of neuroleptic used and ASP. Unfortunately, information on prior exposure to chlorpromazine was not provided. In a longitudinal study,[3] we showed that replacement of chlorpromazine with haloperidol, levomepromazine, trifluoperazine, thioproperazine or pipotiazine resulted in complete resolution of ASP over a period of 6 months to 5 years. We now report the outcome in a patient with ASP in whom treatment with chlorpromazine was replaced with clozapine.

A 45-year-old female patient with blue eyes and blond hair, suffering from schizophrenia since the age of 13, received a lifetime exposure of at least 1748 g of chlorpromazine. At age 36 a blue discoloration of the skin was clearly evident. Eventually, chlorpromazine was discontinued and clozapine substituted (up to a maximum dosage of 600 mg per day). The ASP completely resolved over a period of 4 years. She has now been receiving clozapine (at a current dosage of 400 mg per day) for a total of 6 years and shows no signs of ASP.

This finding, together with our previous observations[3] and those of Ewing and Einarson[4] with loxapine substitution, and O'Croinin and Zibin[5] with flupenthixol substitution, support our view that ASP is an exclusive side effect of chlorpromazine; substitution with a variety of other neuroleptics, including clozapine, allows the condition to resolve, although it may take several years to do so.

References

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